DESCRIPTIONS OF SOME NEW ARANEIDÆ OF NEW SOUTH WALES. No. 1.

By W. J. RAINBOW.

(Plate XII.)

Family THOMISIDÆ.

Genus STEPHANOPIS, Cambr.

STEPHANOPIS ASPERA, sp.nov.

Q. Cephalothorax, 4 mm. long; abdomen, 7 mm. long.

Cephalothorax nearly as broad as long, somewhat convex: caput elevated, sloping forward, terminating in an almost perpendicular eminence, on the extremity of which are several tubercles; on the back, front and sides also a number of tubercles, all of them bluntish, yellow-brown at the base and dark brown at the apex; the junction of the cephalic and thoracic segments indicated by strong, deep, lateral clefts, the projections formed by the clefts strongly tuberculated; at the centre of the cephalothorax a large, strong, coniform tubercle, with several radiating clefts, their margins strongly tuberculated: clypeus strongly rugulose and tuberculated; its surface yellow-brown, the tubercles dark brown.

Eyes eight in number, forming a ring or corona around the upper part of the cephalic eminence; of these the four seated at the back in a slightly curved series—the curvature being directed downwards towards the sides—the largest of the group, equal, equi-distant, each being separated from its neighbours by a distance sub-equal to its diameter; front lateral eyes slightly smaller than

those of the hinder row, separated from each other by fully the diameter of two eyes; front central eyes exceedingly minute, seated lower down the cephalic eminence than the laterals, but each central eye situated nearer to the lateral eye than to each other.

Legs strong and moderately long, their relative lengths being 1, 2, 4, 3, but the front pair somewhat the strongest; similar in colour to the cephalothorax, all furnished with tubercles, short hairs, bristles and spines, but the spines on the tibia and metatarsi of the first and second pairs much the longest and strongest, and directed forwards on the underside.

Palpi moderately long, and strong, similar in colour and armature to the legs, each terminating with a small curved claw.

Falces long and strong, similar in colour to the legs; furnished with short hairs and bristles; and in addition a row of short tooth-like spines on the inner margin of the furrow on the underside of each falx, wherein the fang lies concealed when at rest.

Maxillæ of a brown colour, moderately long, nearly straight, but converging somewhat towards the labium.

Labium short, broad, but much narrower at the apex than at the base; the apex fringed with a few strong bristly hairs.

Sternum yellowish-brown, large, elliptical in outline, slightly broadest towards its fore extremity, and thickly furnished with short hairs.

Abdomen obovate, slightly overlapping; upperside similar in colour and appearance to the cephalothorax, notched in front, somewhat flattish, though slightly depressed towards the middle; hinder part higher and broader than the fore extremity, and thickly tuberculated, with a few small tubercles and punctures scattered over the surface, and an irregular row of rather large tubercles along the lateral margins; the underside and sides of a lighter colour than the upper surface, and strongly rugulose; spinnerets compactly grouped, small, three-jointed, and furnished with rather strong, bristly hairs.

Hab.—Bungendore.

A single specimen, for which I am indebted to Mr. A. Lea. Representatives of this genus, though by no means common, are found in all the Australian colonies. By the form and arrangement of the legs they are enabled to move forwards, backwards, or in a lateral direction with facility. They capture their prey either by surprise or pursuit, and conceal themselves under loose bark or among the rugulosities of trees. Their extraordinary appearance, which closely resembles bark, doubtless serves to protect them from the raids of enemies.

Family CTENIDÆ*

Genus Cycloctenus, L. Koch.

Cyclotenus abyssinus, Urq. 3.

The female of *C. abyssinus* was described by Mr. A. T. Urquhart in Trans. N.Z. Inst., Vol. xxii., 1889, pp. 237-8, and is figured on Plate xvi. of that volume. That author stated in a concluding paragraph of his paper that "two immature males did not differ essentially in form or colouration from the female examples." Through the kindness of Mr. A. S. Olliff, F.E.S., I have been placed in possession of mature \$\mathscr{d}\$ and \$\mathscr{Q}\$ examples, and upon comparing them, with others which I have since received, I find the difference, though not great, is nevertheless sufficient to warrant me in describing the \$\mathscr{d}\$.

I desire to add, further, that from specimens of the female I have examined I find that there is in some examples a slight difference in the colouration of the abdomen. In some the "faint blackish flecks on lateral margins," as described by Mr. Urquhart, are darker than in others, and slightly larger, irregularities which

^{*}In Vol. xxii. Trans. N.Z. Inst. Mr. Urquhart placed this genus, by mistake, in the Family *Lycosidue*, an error which he afterwards corrected in his "Catalogue of the Described Species of New Zealand Araneidae," Vol. xxiv. 1892.

should be borne in mind and carefully noted, in order to prevent the creation of synonyms and consequent confusion, more especially as the examples to which I refer are from the same locality as the one described by that author, namely, Jenolan Caves.

Similar irregularities occur in other species. The Rev. O. P. Cambridge, F.Z.S., has drawn attention to a like occurrence,* notably in connection with Gasteracantha formosa, the abdominal spines of which in four instances (and which he demonstrated by figures†) were different "in the absolute as well as relative length, strength, and direction." In the course of this interesting paper he remarks:—"This will be found, I think, to be the case also with some other species when collectors will take the trouble to collect a series of examples, instead of being satisfied with a few or even single specimens of those which appear to differ most from each other . . . especially if the spiders come from the same locality."

The difference in specimens of *C. abyssinus*, as I have stated, is slight, or comparatively so; nevertheless, the fact of the occurrence of any difference at all is, I think, sufficient to justify me in recording it, and is, indeed, my only apology for doing so.

 $\mathcal{J}.$ Cephalothorax 4 mm. long, 3 5 mm. broad ; abdomen 2.5 mm. long, 2 mm. broad,

Cephalothorax rather longer than broad, convex: caput elevated and rounded on the sides and upper part; the junction of the cephalic and thoracic segments indicated by a strong deep cleft of a transverse curved form, the curvature being directed forwards laterally; colour of the cephalothorax yellow-brown, tinged with dark brown or sepia on the margins of the lateral grooves: clypeus convex, somewhat quadrate, with a deep longitudinal groove running nearly its entire length; marginal band yellow-brown, dark on the outer margin, rather broad, sinuate, and furnished with a few short yellowish hairs; profile contour of the cephalothorax, like that of the Q, representing a double arch.

^{*} P.Z.S., Part II., 1879, p. 280. † P.Z.S., Part II., 1879, Plate xxvi., figs. 11, 11a, 11b, 11c.

Eyes similar in disposition to those of the Q.

Legs long, slender, and gradually tapering off; yellow-brown in colour with dark annulations; their relative lengths 4, 1, 2, 3, the difference between 4, 1, and 2, however, very slight; furnished with short yellowish and black hairs, and armed like the Q with long black spines, similar in number and disposition.

Palpi equal in length to the body, slender, and similar in colour to the legs; the copulatory organs prominent, highly developed and complicated in structure, and armed on their sides with long and strong spines.

Falces yellow-brown, long, strong, broadest towards the middle, and inclined outwards at the lower extremity; furnished with strongish yellow hairs, and a few long coarse black bristles; and in addition a row of short tooth-like spines on the margins of the furrow of each falx, wherein the fang lies concealed when at rest.

Maxillæ long, narrow at the base, broad towards the middle, and slightly pointed at the apex; yellow-brown, furnished with coarse hairs or bristles, and inclined towards the labium.

Labium similar in colour to maxillæ, short, broad, quadrate, slightly concave at apex.

Sternum short, broad, somewhat heart-shaped, pale yellowish, sparsely furnished with yellowish hairs.

Abdomen obovate, slightly overlapping cephalothorax, base somewhat truncated, moderately convex; greyish in colour and thickly covered with coarse hairs and long bristles.

Hab. -- Jenolan Caves.

EXPLANATION OF PLATE.

PLATE XII.

Fig. 1.—Stephanopis aspera.

Fig. 2.—Profile view of spider.

PLATE XII. (continued).

Fig. 3.—Caput, front view, showing arrangement of first row of eyes.

Fig. 4.—Caput, back view, showing arrangement of second row of eyes.

Fig. 5.-Falces.

Fig. 6.—Cycloctenus abyssinus, Urq. &.

Fig. 7.-Maxillary palpus of 3.

Fig. 8.—C. abyssinus, ♀.

Fig. 9.—Showing arrangement of eyes as viewed from the front.

Fig. 10.—Tarsus.

Fig. 11.- Maxillary palpus of Q.

Fig. 12.-Vulva.

Note-Figs. 9-12 after Urquhart.